

low trees near the swamps. Some say that it builds in the branches of the gouty Ambatch trees, which do not rise to more than fifteen feet above the water's edge.

I have transmitted two specimens of *Balæniceps*, a male and a female, to the British Museum, both obtained on the shores of the Victoria Nyanza in 1890. (See Dr. Sharpe's List, above, p. 103, also Ibis, 1901, p. 156.)

XXI.—*Notices of recent Ornithological Publications.*

[Continued from p. 163.]

40. *Andersen on Birds from the Færoe Islands.*

[Sysselmand H. C. Müller's Haandskrevne Optegnelser om Færøernes Fugle. I. Uddrag ved Knud Andersen. Vidensk. Medd. Kbhvn. 1901, pp. 217-252.]

An account is given of the field-notes made by the late Sysselman H. C. Müller on birds observed in the Færoe Islands from 1863 to the time of his death in July 1897. They refer to 123 species, and are arranged in systematic order.

41. *Babson on the Birds of New Jersey, U.S.A.*

[Bulletin of the Bird Club of Princeton University. Vol. i. No. 1. September 1901.]

The first number of the Bulletin of the Bird-Club of Princeton University is appropriately devoted to a list of the birds of the vicinity, which is defined as a circular area of about eight miles radius around the town. The list contains the names of 253 species, with short remarks added to each of them. The "permanent residents" in this part of New Jersey are only 31, whereas the summer residents, which come from the south to breed, are 70. We remark that the House-Sparrow is noted as "abundant as ever," and as having lately taken to driving away the Rough-winged Swallow (*Stelgidopteryx serripennis*) by seizing on its nesting-places.

42. *Barboza du Bocage's List of his Scientific Papers.*

[Publicações Scientificas da J. V. Barboza du Bocage (1857-1901). Lisboa, 1901.]

This is a useful list of scientific memoirs and papers of Prof. J. V. Barboza du Bocage, F.M.Z.S., whose name is well known to us from the excellent work he has done on the ornithology of the Portuguese possessions in Africa. The titles of 177 publications are given (1857-1901) and explanatory notes are added.

43. *Blanford on the Distribution of Indian Animals.*

[The Distribution of Vertebrate Animals in India, Ceylon, and Burma. By W. T. Blanford, F.R.S. Phil. Trans. Royal Soc. ser. B, vol. 194, pp. 335-436 (1901).]

We have already mentioned this excellent and instructive memoir in allusion to the abstract of it published in the Royal Society's 'Proceedings' (see *Ibis*, 1901, p. 723), and have not much to add on the present occasion. The conclusions arrived at, after a careful study of the whole of the Vertebrate Fauna, are stated at the end, and are illustrated by a map in which the proposed divisions of the Indian Fauna are clearly shown.

44. *Burckhardt on the supposed Antarctic Continent.*

[Das Problem des antarktischen Schöpfungscentrums vom Standpunkt der Ornithologie. Von Prof. Rud. Burckhardt. Zool. Jahrb. (Syst.) xv. Heft 67.]

Prof. Burckhardt discusses at some length the question of the former existence of an Antarctic Continent from an ornithological point of view, and comes to the conclusion that the evidence on this subject, supposed to be provided by the Ratitæ and their distribution, gives no support to the theory.

45. *Chapman on new Peruvian Birds.*

[Descriptions of Six apparently New Birds from Peru. By Frank M. Chapman. Bull. Amer. Mus. Nat. Hist. xiv. pp. 225-228.]

Mr. Chapman describes the following new species and subspecies represented in a collection of about one hundred

specimens received from Mr. H. H. Keays, by whom it was made at Inca Mine, in S.E. Peru (lat. $13^{\circ} 31'$ S., long. 70° W., alt. 6000 feet): *Chlorochrysa fulgentissima*, *Malacothraupis castaneiceps*, *Euphonia xanthogastra brunneifrons*, *Chlorospingus flavigularis parvirostris*, *Ochthæca keaysi*, and *Terenura xanthonota*. The *Chlorochrysa* is apparently the same as that described and figured in this Journal (Ibis, 1901, p. 716, pl. xv.) by Graf. v. Berlepsch and M. Stolzmann as *C. hedwigæ*; and if so, Mr. Chapman's name (August 1901) will have priority.

46. Clark on the Affinities of the Humming-birds.

[Are Humming-birds Cypseloid or Caprimulgoid? By Hubert Lyman Clark. Science, New Ser. xv. p. 108 (1902).]

After quoting Prof. D'Arcy Thompson's concluding paragraph in his paper on the pterylosis of *Patagona gigas* (P. Z. S. 1901, p. 311) and Dr. Shufeldt's 'Studies of the Macrochires' (which take exactly opposite views as to the relationship of the Trochilidæ), Mr. Clark, who has just completed a careful examination of certain members of this family and of the Cypselidæ and Caprimulgidæ, pronounces as follows:—

"I am led to disagree with Professor Thompson that the Humming-birds are nearer to the Goatsuckers than to the Swifts, and I must dissent quite as strongly from Dr. Shufeldt's opinion that the pteryloses of Swifts and Humming-birds are 'essentially different.' To my mind the Swifts and Humming-birds are pterylographically nearer each other than are Grouse and Guans, and almost as nearly allied as Grouse and Quail. I cannot see that the *Caprimulgi* have any close relationship to either."

47. Dubois's 'Synopsis Avium' (fasc. v.–viii.).

[Synopsis Avium. Nouveau Manuel d'Ornithologie, par Alphonse Dubois. Fasc. V.–VIII. Royal 8vo. Bruxelles, 1900–01.]

In these four "fascicules" of the 'Synopsis Avium' (see Ibis, 1901, p. 326) the enumeration of the Oscinine Passeres

is continued from No. 4015 to No. 7980 (Muscicapidæ-Fringillidæ). We think that it would have been better to have called the "subspecies" by that name and not "varieties"—a term which should be reserved for abnormal variations (albinos, melanisms, &c.). The following species are figured:—*Geositta rufipennis*, *G. isabellina*, *Lipaugus holerythrus*, *Attila citreopygius*, *Cyanolyca yucatanica*, *Xanthura cyanodorsalis*, and *X. cæruleocephala*.

48. 'The Emu.'

[The Emu, a Quarterly Magazine to popularise the Study and Protection of Native Birds. Official Organ of the Australasian Ornithologists' Union. Editors A. J. Campbell and H. Kendall. Vol. i. pts. 1-2, pp. 1-80, pls. i.-vi.]

We have more than ordinary pleasure in giving a notice of the first two numbers of our "newly-hatched" contemporary, 'The Emu,' the official organ of the Australasian Ornithologists' Union, while we feel a natural pride in observing that 'The Ibis' has at least suggested the title of the Journal, and our constitution, perhaps, to some extent that of the Society which issues it.

A serial has long been needed to collect within its pages the scattered papers on Australasian Ornithology; and we notice that it is intended to include articles on the Protection of Birds, a very necessary matter in Australia of the present day. The membership of the Union is by no means confined to Australia, for we see that Prof. Newton and Mr. J. J. Dalglish are on the list of the founders.

That we owe a heavy debt of gratitude to Federated Australia no one at the present juncture will deny, and we may well hasten in return to shew our readiness to assist in any of her new-born enterprises as far as we are able, though it be by so small a contribution as a congratulatory and appreciative notice of her first united ornithological effort. 'The Emu' itself, we are sure, will prove an undertaking of no small importance, and that it may advance and prosper, even until it rivals our own publication, is our heartfelt desire.

The Union starts its career under the Patronage of the

Prince and Princess of Wales and under the Presidency of Col. W. V. Legge, while the names of the other office-bearers form a guarantee of future excellence. The Editors (Messrs. A. J. Campbell and H. Kendall) have provided papers of a popular, as well as of a scientific, nature—wisely endeavouring to attract thereby all sorts and conditions of the widely-scattered bird-lovers of the Continent; while coloured plates are promised in the future, if funds permit, to replace or augment the reproductions of photographs temporarily utilized.

The first number contains an account of the meetings which led to the formation of the Union, with a photographic reproduction of the signatures of the ornithologists present on Nov. 7th, 1900; the second a report of the Inaugural Session of Oct. 31st, 1901, with the President's address; while both comprise articles by well-known Australian ornithologists, and conclude with memoranda under various permanent headings, such as "Forgotten Feathers," "Stray Feathers," "From Magazines," "Reviews," and "About Members."

49. *Finn's 'Birds of Calcutta.'*

[The Birds of Calcutta. By F. Finn. Sm. 8vo. Calcutta, 1901. Pp. 1-89. Price 2s. net.]

This little book, which is pleasantly written in a popular and slightly jocose style, contains articles originally printed in 'The Asian' on twenty-four kinds of birds. The titles being given in English, the author has managed to include under each heading various species which, among Anglo-Indians at Calcutta, go by the same appellation, while he generally gives the native names also. The habits of the birds are by no means neglected, and stories in connexion with them brighten the pages. The plumage, nests, and eggs are described with sufficient exactitude, and the pamphlet will doubtless be of great use to residents or visitors who are tyros in the science of ornithology.

50. *Finsch's Lists of the Birds of the Leyden Museum.*

[Zur Catalogisirung der ornithologischen Abtheilung von Dr. O. Finsch. VI.-IX. Notes Leyden Mus. xxiii. pp. 1, 33, 58, 97.]

Dr. Finsch proceeds with his catalogue of the birds in the Leyden Museum (see *Ibis*, 1891, p. 725) and his remarks thereupon, and now treats of the Meropidæ, Muscicapidæ, Certhiidæ, and Cuculi. A new species, *Cyornis hosii*, is described from Borneo, and a complete revision of this difficult genus is given. The supposed *Cuculus canoroides* of the Malay Archipelago is re-united to the European *C. canorus*. Various other notes and comments on the birds of these groups are given.

51. *Häcker on the Song of Birds.*

[Der Gesang der Vögel, seine anatomischen und biologischen Grundlagen. Von Dr. Valentin Häcker. 8vo. Jena, 1900. Pp. 6, 102. G. Fischer. Price 3s. 6d.]

This interesting little volume, abundantly and clearly illustrated, gives in the first place an account of the anatomy of the bird's syrinx. There is naturally not a great deal of novelty in this part, excepting, indeed, that the syringes are often exhibited in longitudinal section, thus emphasizing the different thickness of the tracheal and bronchial rings which constitute the organ. The latter part of the volume deals exclusively with the phenomena of song in birds.

52. *Hall on the Species of Gymnorhina.*

[A Revision of the Genus *Gymnorhina*. By Robert Hall. Proc. Roy. Soc. Victoria, xiv. pp. 1-9.]

Mr. Hall shews that many intermediate forms exist between the white-backed *G. leuconota* and the black-backed *G. tibicen*, upon some of which the supposed species *G. hyperleuca* and *G. dorsalis* have been founded. He proposes to reduce them all to one species, and to call it *G. leuconota*. But if this is done the name "*tibicen*" of Latham has the priority and should be employed. As a general rule, however, the white-backed and the black-backed birds are readily distinguishable.

53. *Hartert on an overlooked Swift.*

[On an overlooked Indian Swift. By Ernst Hartert. *Ornis*, xi. p. 199.]

The resuscitated Swift is *Cypselus acuticauda* of Jerdon (*B. Ind.*, Suppl. p. 870, 1864), which in the *B. M. Catalogue* (xvi. p. 444) has been united to *Micropus apus pekinensis*. Mr. Hartert has now found a second specimen in the Tring Museum (from Cherripungi, Khasia Hills), which he has compared with the type in the Liverpool Museum (from Nepal) and found to be identical with it. He calls it *Apus acuticauda*, and describes its characters. We prefer to call it by Blyth's name *Cypselus acuticauda*.

54. *Hartert and Hellmayr on two new Thrushes.*

[On two new Thrushes from Western Colombia. By Ernst Hartert and Carl E. Hellmayr. *Nov. Zool.* viii. pp. 492, 493.]

Turdus ignobilis goodfellowi, from the Cauca valley of Colombia, and *T. colombianus* (a southern representative of *T. obsoletus*, but nearly allied to *T. nigrirostris*), from Cali, Western Colombia, are described as new.

55. *Helm on some Birds of Heligoland.*

[Ueber einige ornithologische Beobachtungen auf Helgoland. Von F. Helm. *Ornithol. Monatsb.* ix. pp. 149-151.]

This paper treats of the Starling, Linnet, Swift, Hooded Crow and Wild Duck, as noticed on Heligoland.

56. *Helm on the Flight of Birds.*

[Betrachtungen über die Beweise Gätke's für die Höhe und Schnelligkeit des Wanderfluges der Vögel. Von F. Helm. *J. f. O.* 1900, pp. 435-452.]

Weitere Betrachtungen über die Beweise Gätke's für die Höhe und Schnelligkeit des Wanderfluges der Vögel. Von F. Helm. *J. f. O.* 1901, pp. 289-303.]

Herr Helm considers that, although we may agree with many of Gätke's statements regarding the flight of Birds, certain of his conclusions are most surprising, and are founded on premisses which may be shown to be false. Especially

is this true of the velocity of the movements of the flocks on migration, which Gätke calculates in the case of the Red-spotted Bluethroat at some 45 geographical miles per hour. This estimate is founded on the belief that the bird quits Egypt at the end of April or beginning of May, while it arrives in Heligoland at about the same time of year; so that some 400 miles would be covered in one spring night of perhaps 9 hours duration. Moreover, Gätke appears to have believed that the flocks never, or hardly ever, rested by the way. Now Herr Helm is at great trouble to shew that the Blue-throat leaves Egypt in February or March, and proves by many a record that it occurs in spring much more frequently than has been hitherto believed in the intermediate districts of Austria and Germany. It therefore has one or two months in which to compass the journey.

Again, as to the height at which the flocks travel, he considers that former calculations may have been erroneous, for he thinks that the state of the atmosphere has not been sufficiently reckoned for, and that it may produce delusive effects both upon the eye and the ear of the observer. Sound travels very differently through different media, and the distance of a bird may be extremely difficult to judge correctly. The second article brings under consideration the flight of Swallows, Carrier-Pigeons, and Ducks, with a discussion of the effects of temperature.

57. *Hudson's 'Birds and Man.'*

[Birds and Man. By W. H. Hudson, F.Z.S. London. 8vo. Longmans. 318 pp. 1901. Price 6s. net.]

This new volume of our friend Mr. W. H. Hudson's essays on topics connected with bird-life will be of interest to ornithologists as well as to the world in general. They relate to such popular subjects as Daws, Ravens, and Willow-Warblers, and to such familiar places as London, Wells, and Selborne, but will be none the less appreciated by many of us. The Dartford Warbler has deservedly a chapter to itself: Mr. Hudson found it still existing in four counties "in a few widely-separated localities," but in spite of the "protection-

orders" of the County Councils it will probably be soon extinct.

58. *Hutton on Migratory Birds in New Zealand.*

[Our Migratory Birds. By Capt. F. W. Hutton, F.R.S. Trans. New Zeal. Inst. 1900, p. 251.]

This is an interesting paper which we commend to the notice of all who wish to study the difficult problems of Migration. The only *regular* summer visitors to New Zealand, for the purpose of breeding there, are the two parasitic Cuckoos *Eudynamis taitensis* and *Chrysococcyx lucidus*. But numerous Waders and other birds appear there more or less sporadically, besides a number of accidental visitors from Australia and other adjacent lands.

59. *Madarász on a new Palæarctic Bird.*

[Ueber einen neuen palæarktischen Vogel: *Acanthopneuste puella*, n. sp. Von Dr. Julius v. Madarász. Természet. Füzet. xxv.]

Acanthopneuste puella is based on several specimens received by the National Hungarian Museum from the vicinity of Vladivostock, Eastern Siberia. It is nearly allied to *Phylloscopus coronatus* of Japan (Cat. B. v. p. 48), but has no light middle stripe on the head, and shews other points of difference.

60. *Mitchell on the Classification of Birds.*

[On the Intestinal Tract of Birds; with Remarks on the Valuation and Nomenclature of Zoological Characters. By P. Chalmers Mitchell, D.Sc. Oxon., F.L.S., F.Z.S. Trans. Linn. Soc. Lond. ser. 2 (Zool.), vol. viii. pt. 7, pp. 173-275; 3 plates.]

Before the appearance of the present paper Dr. Mitchell had, in a communication to the Zoological Society of London, directed attention to the importance of the intestinal tract as a basis of bird-classification.

The very large series of differences in the size of the various loops and folds of this tract lend themselves to a regular arrangement of birds in correspondence therewith, and, what is more important, permit of a reasonable guess at the more

archaic forms, and thus allow of the tracing of the various modifications. Such types as the Gallinaceous birds and *Chauna* lie at the base of the series with numerous regular folds quite like those of a crocodile. Thence the changes that have taken place can be followed out in several directions, and with great ease to the reader on account of the useful diagrammatic lines of ascent figured on the author's plates. It must be gratifying to him, as it is reassuring to us, to find that the scheme recommended does not do violence to old-established views of classification. Thus the Petrels are placed near to the Storks and Herons as W. A. Forbes urged they should be; and the Gulls are put near the Charadriiform birds. It is largely the absence of all sensational reshuffling of the groups which leads us to believe that Dr. Mitchell has tapped a new source of information, which will serve, perhaps even better than anything that has gone before, to help us to the proper arrangement of birds.

61. *Nelson on new Mexican Birds.*

[Descriptions of a new Genus and eleven new Species and Subspecies of Birds from Mexico. By E. W. Nelson. Proc. Biol. Soc. Washington, xiv. pp. 169-175.]

Mr. Nelson describes as "new species" *Crax chapmani* from Yucatan, *Attila mexicanus* from Tabasco, *Myiopagis yucatanensis* from Yucatan, *Stelgidopteryx ridgwayi* from Yucatan and Mexico, and *Troglodytes peninsularis* from Yucatan, besides several subspecies. A new genus "*Nyctiagrius*" is made for *Caprimulgus yucatanicus* Hartert (Cat. B. xvi. p. 575).

62. *Osgood on the Birds of the Queen Charlotte Islands.*

[Natural History of the Queen Charlotte Islands. By Wilfred H. Osgood. N. American Fauna, No. 21, pp. 7-50, pls. i.-v. Washington, 1901.]

After an introductory account of the islands, which lie off the coast of British Columbia, and details of their physiography, Mr. Osgood proceeds to tabulate the species of Vertebrates which are found there, furnishing in conclusion notes on those of most importance and a bibliography of the

works consulted. He found birds abundant, but of the ninety-six species observed the majority were much the same as in the Sitkan district. Two new forms are described as peculiar to the group—*Cyanocitta stelleri carlottæ* and *Dryobates picoideus*; while a third, *Nyctala acadica scotæa*, is also found on the mainland.

63. Osgood on the Birds of Cook Inlet, Alaska.

[Natural History of the Cook Inlet Region, Alaska. By Wilfred H. Osgood. North American Fauna, No. 21, pp. 51-81, pls. vi., vii. Washington, 1901.]

After leaving the Queen Charlotte Islands, Mr. Osgood and his assistant made a "biological reconnaissance" into the district of Cook Inlet, just south of the great Alaskan promontory. It was too late (August and September) for the summer migrants, and the birds met with were permanent residents or "fall stragglers." Land-birds were not numerous either as species or individuals. The list enumerates 77 species, all known Alaskan forms.

64. Pycraft on the Neognathine Palate.

[Some Points in the Morphology of the Palate of the *Neognathæ*. By W. P. Pycraft, A.L.S., F.Z.S. Journ. Linn. Soc. Lond. (Zool.) xxviii. pp. 343-357, pls. 31, 32.]

Mr. Pycraft here discusses the peculiarities and changes of the palate in the *Neognathæ*, compared with those in the *Palæognathæ*, the former group consisting of the "Carinate" birds, with the exception of the Tinamous, and the latter of the Tinamous and the "Ratite" birds. He prefers the palate to the sternum as a guide to classification. The differences he considers to be those of degree, and not of kind, while the Palæognathine type is undoubtedly the oldest, and *Dromæus* the most typical genus in this respect. *Dromæus* is therefore taken as the standard, and is compared as regards the palate with *Rhea* and the Tinamous (which are much alike); a glance is then taken at the "Carinate" birds, of which many examples are considered. Summing up, the vomer and pterygoid are stated to be uninterruptedly

connected with one another throughout life in the *Palaeognathæ*, while the palatines remain perfectly separated from one another "caudad," and are connected only with the maxillo-palatine processes "distad"; in the *Neognathæ* the relations of these bones are of the opposite character, and the palate is undoubtedly undergoing a further change. The most primitive form of Avian palate is the Dromæognathous, and not the Schizognathous.

65. *Reiser and Knotek on Bird-migration in Bosnia and Herzegovina.*

[Ergebnisse der ornithologischen Zugsbeobachtungen in Bosnien und der Hercegovina. Verfasst von Custos Othmar Reiser und Prof. Johann Knotek. Wissensch. Mitth. aus Bosnien u. Hercegovina, Bd. viii.]

This is the report of the Committee for the observation of bird-migration in Bosnia and Herzegovina for the years 1897-1900, commencing with the autumnal migration of 1897, and ending with the vernal migration of 1900. After lists of the various stations and observers, the notes of the latter are given, arranged in systematic order. Then follows a *résumé* of the details arranged in the order of the calendar, so that we can see what species passed on each particular day. In the autumnal migration of 1899, 51 species are recorded; in the vernal migration of 1900, 62.

66. *Robinson and Richmond on Venezuelan Birds.*

[An annotated List of Birds collected in the Vicinity of La Guaira, Venezuela. By Wirt Robinson and Charles W. Richmond. Proc. U.S. Nat. Mus. xxiv. pp. 163-178.]

This is an account of two collections made in 1895 and 1900 in the vicinity of La Guaira, the seaport of Caraccas, by Capt. Robinson, together with a few specimens obtained by Mr. Lyon, who accompanied Capt. Robinson on his second trip. Eighty-one species are enumerated as represented in the series, amongst which a Wren (*Microcerculus pectoralis*) is described as new. Most of the others are well known. This is a poor result, but the avifauna of the coast-district of La Guaira is evidently very meagre. The

collectors should have gone high up into the mountains above, where they would have entered the range of some scarce and little-known species. A few field-notes are added by Capt. Robinson.

67. *Rothschild and Hartert on Birds from Guadalcanar.*

[List of a Collection of Birds from Guadalcanar Island, in the Solomon Group. By Hon. Walter Rothschild, Ph.D., and Ernst Hartert. Nov. Zool. viii. pp. 373-382.]

A collection made by Mr. Albert S. Meek on Guadalcanar, Solomon Group, in April and May, 1901, is described, and 57 species are enumerated. Many useful notes are given, and *Ceyx lepida collectoris* is described as a new subspecies. The group of *Baza subcristata* is worked out, and five subspecies are recognised.

68. *Sarasin Brothers on the Geological History of Celebes.*

[Ueber die geologische Geschichte der Insel Celebes auf Grund der Thierverbreitung. Von Dr. Paul Sarasin und Dr. Fritz Sarasin. 1 vol. 4to. Wiesbaden, 1901. 170 pp.; 19 pls.]

This learned and well-executed memoir is an attempt to explain the complexities of the existing fauna of Celebes by a careful study of its land-animals, to our knowledge of which the authors have largely contributed. The Land and Fresh-water Mollusks, the Reptiles and Amphibians, the Birds, the Mammals, and the Land-Planarians are all thoroughly discussed, and their distribution illustrated by a series of elaborate maps. Four "land-bridges" are shown to be necessary to account for the complications of the Celebean fauna, and are supposed to have formerly connected this strange island with Java, the Philippines, the Moluccas, and Flores. No one interested in distribution should omit to study this valuable piece of work.

69. *Schalow on Birds from Central Asia.*

[Beiträge zur Vogelfauna Centralasiens. Uebersicht der von Herrn Oberamtmann Dr. Holderer während einer Durchquerung Asiens gesammelten Vögel. Von Herman Schalow. J. f. O. 1901, pp. 393-456, Taf. iii., iv.]

In the year 1887, Dr. Holderer of Heidelberg and Dr. Futterer of Karlsruhe made a journey across Central Asia from the Caspian to China, and of this journey Herr Schalow now gives us the ornithological results. The travellers made but a short stay at Bokhara, Samarkand, and Tashkent, and devoted their main energies to Chinese Tibet, their chief collecting-stations ranging from the Altai, Pamir, and Kashgar districts to the Gobi Desert, the Nan-schan Range, the Sining-ho Valley, Koko-nor, the Upper Hoang-ho, and the Tsin-ling Mountains. After an account of the literature referring to these regions, we are given a list of species, which contains few biological notes, but is augmented by remarks on the contents of the birds' stomachs. Pheasants were one of the main features of the avifauna, *Phasianus holdereri*, from Min-tschou, being described as new. *Podoces biddulphi* was obtained at Ak-su in the isolated oasis near Thian-schan, and *P. hendersoni* elsewhere, but not *P. humilis*. Three examples of the rare *Archibuteo hemiptilopus* Blyth (= *A. strophiatatus* Hodgs.) were procured at Koko-nor, and a new species, *A. holdereri*, at the same place, while a subspecies, *Ruticilla rufiventris pleskii*, from Nan-schan, is recognised as distinct.

70. *Scott on the Song of Birds.*

[Data on Song in Birds—the Acquisition of new Songs. By William E. D. Scott. Science, xv. p. 178 (1902).]

Our attention is here called to some amusing facts respecting the song of birds and their powers of inventing new songs, of which the writer gives some remarkable examples. That a Rose-breasted Grosbeak (*Zamelodia ludoviciana*) should be capable of talking quite plainly is surprising to us, as are others of Mr. Scott's stories. No one interested in bird-song should omit to read this paper.

71. *Shufeldt on the Osteology of the Pigeons.*

[On the Osteology of the Pigeons (*Columbæ*). By R. W. Shufeldt. Journ. of Morphol. xvii. pp. 487–514, pls. A & B, 4 cuts.]

In this paper, treating only of the Pigeons of the United

States, Dr. Shufeldt gives us a considerable amount of information on various points, and shews that the morphology of the group is particularly homogeneous. He selects *Ectopistes* as "a very good average Columbine type," and gives full details of its osteology, in comparison with those of *Zenaidura*, *Zenaida*, *Engyptila*, *Melopelia*, *Columbigallina*, *Scardafella*, *Geotrygon*, and *Starnænas*, the last-named differing somewhat from the others in its trunk-skeleton. *Didunculus* is treated separately and is figured, while for the genus *Columba* the author has been obliged to rely upon the work of his predecessors. The affinities of the group are shown to be with the Gallinaceous birds.

72. Studer and Fatio on the Birds of Switzerland.

[Katalog der Schweizerischen Vögel bearbeitet im Auftrag des eidgen. Departements des Innern (Abteilung Forstwesen) von Dr. Th. Studer und Dr. V. Fatio. Lief. III.* Pp. 193-418; 2 maps. 8vo. Bern, 1901.]

Many observers have assisted the authors in the production of this carefully compiled Catalogue, of which the present part contains the *Insessores*, *Coraces*, *Scansores*, and a portion of the *Captors*, to use the names that evidently reflect the preferences of the learned writers. Perhaps the most interesting species included are *Merops apiaster*, *Coracias garrula*, *Pastor roseus*, and *Oriolus galbula*, for which maps of distribution are given; with *Picoides tridactylus* and *Bombycilla garrula*, for which none are thought necessary. The birds are considered from all points of view—as residents, migrants, and so forth; references to the literature are given in profusion for the several regions; and other information is added; the whole forming a standard work on Swiss Ornithology.

73. Verrill on the "Cahow" of the Bermudas.

[The Cahow of the Bermudas, an Extinct Bird. Ann. & Mag. Nat. Hist. (7) ix. p. 26.]

The "Cahow," or "Cohowe," was a bird described by the earliest settlers in the Bermudas as good for food, very

* For notices of Parts 1 and 2 see 'Ibis,' 1889, p. 394; 1899, p. 394.

abundant, and easily captured—so easily, in fact, that it quickly became extinct. After quoting many extracts from old authorities on the subject, Mr. Verrill comes to the conclusion that the “Cahow” was a “web-footed sea-bird,” not a Shearwater nor a Petrel of any kind, but possibly an Auk. It was strictly nocturnal in its habits. It came to the Bermudas in October to breed, and remained until June. It laid its single large white egg in burrows. It was about the size of a Pigeon, brown above and white beneath, and had a strong hooked bill. Now, what was the “Cahow”?

XXII.—Letters, Extracts, Notices, &c.

WE have received the following letters, addressed “to the Editors” :—

SIRS,—In volume iv. of the “Birds” (Fauna of British India, p. 278) Dr. Blanford states that he considers it almost certain that Jerdon and Blyth mistook the “Knots” which they obtained at Madras and in Calcutta for *Tringa canutus*, whereas they were really *T. crassirostris*. I therefore beg leave to draw the attention of your readers to the fact that I have to-day (January 16th) obtained in our Bazaar an undoubted Knot alive, the first that I have seen here. I may also add that the specimens 1592 A & B of Blyth’s ‘Catalogue’ are still in existence, and are *T. canutus*, as he said. It is evident, therefore, that this species visits the Indian Empire as well as *T. crassirostris*, though it is, of course, an irregular visitor, like so many others of our wild-fowl.

For instance, Baer’s Pochard (*Fuligula baeri*), which I have known to be occasionally common, has been scarce here for some years now; while, on the other hand, the Bronze-cap Teal (*Eunetta falcata*), formerly very scarce, has been arriving regularly for the last few years. This winter I have already obtained four specimens of the last-named Duck, although the season is an excessively bad one for water-fowl of all kinds. I have recorded many previous occurrences of